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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/035,612	03/05/98	YUZAWA	K SONYJP-3.0-0

EXAMINER	
BROWN, R	
ART UNIT	PAPER NUMBER
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000530 TM02/0801
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/035,612	Yuzawa
Examiner	**Art Unit**
Reuben Brown	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *May 18, 2001*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *3, 4, and 7-26* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *3, 4, and 7-26* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 9-10, 12-20, 22-26, 3-4 & 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostrecki, (U.S. Pat # 5,729,549), in view of Russo (U.S. pat # 5,765,113).

Considering claims 9 & 19, the amended claimed data reception device and method designed to receive wirelessly transmitted digital signals comprising a program software detecting means for detecting data of program software in an ordinary receiving mode wherein the program software is executed to control the data reception device, reads on Kostrecki which discloses that software applications are wirelessly transmitted from a transmitter to a user's terminal device, (Abstract, col. 5, lines 60-65 thru col. 6, lines 1-25). In Kostrecki the downloaded programming software extends the functionality of the user's terminal device, i.e controls the terminal device,

col. 29, lines 31-40 & col. 30, lines 10-50. In order for the terminal device to operate the downloaded software application it necessarily must detect the instant received program software as required in the claim. The claimed feature of the program software being multiplexed in the digital data is disclosed by Kostrecki (col. 6, lines 16-28). Kostrecki also teaches storing the downloaded, extracted program software (col. 30, lines 1-12).

However, Kostrecki does not discuss the claimed subject matter relating to signal quality detection. Nevertheless, at the time the invention was made, one of ordinary skill in the art would have been motivated to modify Kostrecki to include signal quality detection means for the well known advantage of ensuring that the users receive at least a certain minimum of reception quality. Furthermore, at the time the invention was made it was well established in the art of quality control of data reception to apply at least one of several well known techniques to maintain signal quality such as switching to a different channel, when the noise or error rate exceeds a certain threshold on the given channel. For instance, Russo teaches that an RF transceiver includes a capability to apply corrective action such as, at least delay communication with the transmitter, i.e stop receiving data when the signal quality is below a certain threshold, see Abstract & col. 2, lines 32-36. This feature reads on the claimed recitation of only storing program software when the average signal quality is better than a certain threshold, since once the receiver does not have communication with the transmitter, it is not receiving data and thus is not storing data. It would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Kostrecki, to include a signal quality detection and correction algorithm, for the desirable improvement maintaining a least certain level of reception quality as taught by Russo.

As for the additional claimed feature of the detecting means detection quality levels in a predetermined period of time, it would have been obvious for one ordinary skill in the art to extend the detection period to any particular length, such that the longer the period, the higher the level of accuracy that the system will have since the data will receive more sampling or testing. Regarding the claimed feature of calculating an average quality level, Russo calculates or measures an average BER, which is referred to as the actual BER, see col. 4, lines 35-39. This actual BER is compared to an expected BER in order to determine whether the corrective action discussed above will be taken.

Considering claims 10 & 20, the software programs and application data in Kostrecki are identified by a PID identifier, such that the receiving device uses it in order to extract the particular program software from the data stream, see Kostrecki (col. 29, lines 31-65 & col. 30, lines 65-67).

Considering claims 12 & 22, the detecting means in Russo is used to control whether the receiver will delay/cutoff communication with the transmitter.

Considering claims 13-14, Kostrecki, at col. 30, lines 1-30 only teaches storing downloaded application data in RAM. However examiner takes Official Notice is taken that at the time the invention was made, non-volatile flash memory was very well known in the art. It would have been obvious to modify Kostrecki to utilize non-volatile flash memory at least for the known desirable advantage of storing the application data in a manner such that it would not be erased when power is removed from the user's terminal device, thereby avoiding the need for the user to re-download data, for instance if the terminal device is turned-off by accident.

Considering claims 15 & 23, Official Notice is taken that buffer technology was well known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to utilize buffers to temporarily store portions of the received data as prior to being written in the main non-volatile memory, at least for the known advantage of more efficiently utilizing the memory.

Considering claims 16 & 24, Kostrecki utilizes MPEG-2 technology, see col. 12, lines 14-18 & col. 29, lines 40-45.

Considering claims 17 & 25, the program software Kostrecki is directed to an application program, see col. 30, lines 1-50.

Considering claims 18 & 26, Russo is directed to detecting the BER.

Considering claims 3 & 7, although Kostrecki and Russo do not discuss displaying the quality of reception on a GUI, it would have been obvious for one of ordinary skill in the art to utilize the well known GUI technology at least for the desirable benefit of informing the user, at least so that he may override the operation determined by the system.

Considering claims 4 & 8, Kostrecki is directed to digital broadcast utilizing MPEG technology, see Abstract & col. 29, lines 40-50.

3. Claims 11 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostrecki & Russo as applied to claims 9 & 19 above, and further in view of MacInnis, (U.S. Pat # 5,951,639).

Considering claims 11 & 21, MacInnis teaches including at least the version or manufacturing information of a transmitted/downloaded software application, col. 5, lines 1-61. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Kostrecki & Russo, with the known technique of including the manufacturer information and/or operating system/application version ID at least for the desirable improvement of determining whether the instant downloaded program software is compatible with the user's hardware, as taught by MacInnis.

Response to Arguments

4. Applicant's arguments with respect to claims 9 & 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's claims.

A) Microsoft Dictionary Teaches the advantages of non-volatile memory in general, and flash memory in particular.

B) Bacon Teaches storing downloaded subscriber applications in Flash EEPROM, see Abstract; col. 9, lines 61-67; col. 11, lines 1-10 & col. 12, lines 24-38.

C) Kauffman Teaches downloading operating system to user's terminal. Includes a protocol which checks whether the downloaded operating system is valid, if not the system reverts back to the previous (downloaded) firmware, already stored in non-volatile memory.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703)872-9314, (for formal communications intended for entry)

Or:

(703) 872-9314 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on Monday thru Friday from 830am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600